

## CONTINUATION

### **I. Background on Investigation**

I am conducting an investigation into a distribution of controlled substances in February, 2020 that resulted in the death of a man named Scott Lecompte, contrary to 21 U.S.C. § 841(a). A state-authorized search of Lecompte's phone showed that he had arranged to purchase controlled substances from a person using the phone number **(616) 589-2510**. The same state search warrant allowed police to assume Lecompte's identity using his phone. Police did so, and set up an additional drug deal with the user of **(616) 589-2510**. Two men showed up at the time and place police arranged for this follow-on deal, and police recovered four phones from that scene. I want to search the phone that is associated with **(616) 589-2510** as I expect that phone contains evidence of violations of 21 U.S.C. § 841(a).

To figure out which phone was the right one to search, I asked this Court to authorize a limited search of the SIM cards of all four devices. I made this request on 05/28/2020 in case number 20-mj-199. The facts from the continuation supporting that search warrant are incorporated into this continuation by reference.

This Court authorized that search to determine if one of the devices had an International Mobile Equipment Identity Number ("IMEI number") that matched the IMEI number of the device used to set up the February, 2020 drug transactions. On the condition that one of the devices had a matching IMEI number, this Court authorized a further search of the contents of that device only.

After analyzing the SIM cards for all Subject Devices, I have learned that Subject Device 4 matches the IMEI number of the device that T-Mobile says was registered to **(616) 589-2510** – all except for the last digit. According to T-Mobile, the IMEI number associated to the phone number of **(616) 589-2510** is **355865101142040** and the IMEI number located on Subject Device 4 is **355865101142047**. Subject Device 4 is a Blue Samsung Smart Cell Phone.

### **II. Purpose of this Search Warrant**

Through further investigation, I have determined that Subject Device 4 is, in fact, the same mobile device used to facilitate the drug transactions from February, 2020, even though the last digit of that device's IMEI number does not match the IMEI number reported by T-Mobile. The purpose of this search warrant is to create a record of the additional things I have learned, and to obtain this Court's authorization to proceed with a search of the contents of Subject Device 4, despite this last-digit discrepancy.

### III. Further Investigation Since Last Search Warrant

#### A. What I Have Learned about IMEI Check Digits

After finding this last-digit discrepancy, my colleagues and I did more research on IMEI numbers to see if there was a reason why all but the last digit IMEI numbers from the SIM card and T-Mobile would match. Western Michigan Enforcement Team (“WEMET”) detectives discovered that IMEI numbers either come in a 17-digit or 15-digit sequences of number. The IMEI format currently utilized a AA-BBBBBB-CCCCC-D.

- AA: These two digits are for the Reporting Body Identifier, indicating the GSMA approved group that allocated the TAC (Type Allocation Code).
- BBBBBB: The remainder of the TAC (FAC).
- CCCCC: Serial sequence of the Model (SNR)
- D: Luhn check digit of the entire model or 0. (This is an algorithm that validates the ID number).

Detectives confirmed this information regarding IMEI numbers using information provided by Global System for Mobile Communication Association (“GSMA”). GSMA represents and leads mobile network operators in the United States, Canada, Greenland and Caribbean. Working alongside some of the mobile industry’s most influential companies, GSMA North America aims to increase the region’s commercial opportunities and develop a collaborative and socially responsible and ecosystem. In this mission, GSMA North America convenes several leading annual industry events, provides regulatory expertise and technical knowledge to support network optimization.

GSMA publications explain that the last digit of an IMEI number, that is, the Check Digit, shall be calculated according to Luhn formula. The Check Digit is a function of all other digits in the IMEI. The Software Version Number (SVN) of a mobile is not included in the calculation. The purpose of the Check Digit is to help guard against the possibility of incorrect entries to the CEIR and EIR equipment. According to GSMA, the spare digit shall always be transmitted to the network as “0”.

This explains why the return subpoena information from T-Mobile regarding the IMEI number for phone number (616)589-2510 was listed as **355865101142040** and the physical number on Subject Device 4 is listed as **355865101142047**. By design, mobile devices always report their check digit to a service provider network as “0,” so it makes sense that this is the check digit that T-Mobile reported in this case.

The Luhn formula was completed on the IMEI number of **355865101142040**, returned by T-Mobile, and it was discovered that the last digit, also known as the check number, should be a “7”, therefore matching the IMEI number on Subject Device 4.

*B. Other Evidence From the SIM Card Shows That Subject Device 4 is the Matching Device*

On 06/01/2020, I forensically analyzed the SIM Card from Subject Device 4 with the assistance of Holland Police Sergeant Jim Ludema, who is a Certified Forensic Computer Examiner. During the forensic analysis of the SIM card, I learned that the SIM card itself showed it was attached to the phone number of **(616)589-2510**, the same phone number that Lecompte was messaging with prior to his lethal drug overdose. The SIM card also had an attached IMSI number of **310260085456471**. “IMSI” stands for International Mobile Subscriber Identity (**IMSI**). Like an IMEI, the IMSI is a unique **number** associated a specific mobile device. An IMSI number is used with all Global System for Mobile Communications (GSM) and Universal Mobile Telecommunications System (UMTS) network mobile phone users used for identifying a GSM subscriber.

When T-Mobile provided investigators in this case with IMEI number information in response to a subpoena, the company also provided IMSI number information. T-Mobile reported that the IMSI number **310260085456471** was assigned to **(616)589-2510** on the dates of February 22-24, 2020. These are the dates of the drug transactions under investigation in this case, and this IMSI number and phone number match the information recovered from the SIM card from Subject Device 4.

For these reasons, I am confident that Subject Device 4 is the device used to facilitate the drug transactions under investigation in this case. For these reasons, and for the reasons provided in the continuation in support of 20-mj-199, I submit there is probable cause to believe that Subject Device 4 contains evidence of illegal distribution of controlled substances, contrary to 21 U.S.C. § 841(a). I ask this Court to authorize a search of the contents of this device consistent with the identifying information and search and seizure limitations described in Attachments A and B.

*C. Time of execution.*

Serving this warrant will not require intrusion into a dwelling, place of business, or similar real property. Rather, service will consist of examining Subject Device 4 which is already in government custody. Accordingly, I submit there is good cause to authorize execution of the requested warrant at any time of the day or night.